MATH 27022 F. M. Probability June 2015 feedback

1.
   a) All parts answered fairly well. Most students knew definition of a sigma field.
   
   b) i) Many students could not state CS inequality.
       
       ii) Many reasonable attempts, but often marks lost through incomplete explanations of the root existence concept.
       
       iii) Not many completely correct solutions, but many on right lines gaining partial marks.

2.
   a) i) and ii) generally answered well. With iii) many attempts fell down due to not knowing sum1/n divergent.
   
   b) Not answered very well. Method of i) was familiar, so expected better attempts. Part ii) less so, so only 3 marks awarded.

3.
   a) Part i) bookwork answered well.
      
      Part ii) seen on problem sheet. Many gaining partial marks but few completely correct.
      
      b) i) Good on the whole.
      
      ii) Seen similar. Answered fairly well
      
      iii) Many could not state the K lemma. Those who did generally managed to use it, together with part ii), to answer iv).

4.
   a) All parts generally answered well
   
   b) Many reasonable attempts. Marks lost through lack of explanation.
   
   c) Have seen on problem sheet. Many gaining partial marks but few complete solutions.

NOTE: A good understanding of real analysis: convergence of sequences and series is IMPORTANT.